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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,346	02/17/2004	Kyle Marvin	BEAS-01444US1 SRM/DJB	9956
23910 7590 12/19/2006 FLIESLER MEYER LLP 650 CALIFORNIA STREET 14TH FLOOR SAN FRANCISCO, CA 94108			EXAMINER KENDALL, CHUCK O	
			ART UNIT 2192	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/780,346

Applicant(s)

MARVIN ET AL.

Examiner

Chuck O. Kendall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

5/19/06, 2/17/06, 2/15/05, 3/14/05, 2/28/05, 2/17/05, 2/15/05, 10/10/05
U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20061117

DETAILED ACTION

1. This is in response to application filed 02/17/04.
2. Claims 1 – 47 have been examined.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 40 – 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims draw limitations to a signal or transmission media which is merely a form of energy and hence is not statutory subject matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1 – 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Marvin et al. 20030167358.

Regarding claim 1, a method for creating a proxy object capable of communication with an external entity, comprising:

specifying a proxy object definition for the proxy object wherein the proxy object definition defines a first function for communicating with the external entity (Figure 3, 302);

specifying at least one implementation class for the proxy object definition, wherein the at least one implementation class does not implement the first function (Figure 3, 306); and

wherein the at least one implementation class includes functionality to support one of:

proxy object design, software compilation and software execution (3,[0048]).

Regarding claim 2, the method of claim 1, further comprising:

compiling the proxy object definition and/or the at least one implementation class (3,[0048]).

Regarding claim 3, the method of claim 1 wherein:

the at least one implementation class is specified with a source code annotation (4,[0069]).

Regarding claim 4, the method of claim 1, further comprising:
specifying at least one callback declaration (Figure 3, 305).

Regarding claim 5, the method of claim 1 wherein:
the functionality to proxy object software design includes a wizard that can guide the creation of the proxy object (3,[0051]).

Regarding claim 6, the method of claim 1 wherein:
the functionality to support software compilation includes at least one function to validate function calls and property settings in source code (3,[0053]).

Regarding claim 7, the method of claim 1 wherein:
the functionality to support software execution includes at least one function to acquire and release at least one resource and includes the ability to invoke a function on the external entity (3,[0054]).

Regarding claim 8, the method of claim 1 wherein:
the external entity can be one of:
a database, a legacy system, and a software application (3,[0060]).

Regarding claim 9, the method of claim 1 wherein:

the proxy object can inherit from a proxy object interface declaration at least one of:

a function, a property and a callback (4[0064]).

Regarding claim 10, the method of claim 1 wherein:

the proxy object definition includes a declaration of the first function (4[0064]).

Regarding claim 11, a method for a proxy object to communicate with an external entity wherein the proxy object has an implementation class, said method comprising:

invoking a first function on the external entity via the proxy object, wherein the first function is not defined by the implementation class (4,[0059]); and

dynamically determining the whether or not the first function invocation is proper based on metadata derived from a proxy object definition (6,[0089]).

Regarding claim 12, the method of claim 11 wherein:

the metadata includes at least one of the following:

a proxy object interface declaration, a property setting, a callback declaration, and a function declaration [0104].

Regarding claim 13, the method of claim 11, further comprising:

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invoking via the proxy object a callback function in an application based on receipt of an asynchronous event from the external entity [0104].

Regarding claim 14, the method of claim 11 wherein:

the implementation class is specified with a source code annotation [0095].

Regarding claim 15, the method of claim 11 wherein: the implementation class includes at least one function to acquire and release at least one resource and includes the ability to invoke a function on the external entity [0094].

Regarding claim 16, the method of claim 11 wherein: the external entity can be one of:

a database, a legacy system, and a software application (3,[0060]).

Regarding claim 17, the method of claim 11 wherein: the proxy object can inherit from a proxy interface declaration at least one of: a function, a property and a callback (4[0064]).

Regarding claim 18, the method of claim 11 wherein:

the proxy object definition includes a declaration of the first function(4[0064]).

Regarding claim 19, the system version of claim 1, see rationale above as previously addressed.

Regarding claim 20, the system of claim 19, further comprising:
the compiler is capable of generating metadata that can be used by the proxy object at runtime to invoke the first function ([0089])

Regarding claim 21, the system of claim 19 wherein: the at least one implementation class is specified with a source code annotation [0095].

Regarding claim 22, the system of claim 19, further comprising: at least one callback declaration (Figure 3, 305).

Regarding claim 23, the system of claim 19 wherein: the functionality to proxy object software design includes a wizard that can guide the creation of the proxy object (3,[0051]).

Regarding claim 24, the system of claim 19 wherein: the functionality to support software compilation includes at least one function to validate function calls and property settings in source code (3,[0053]).

Regarding claim 25, the system version of claim 7, see rationale above as previously addressed.

Regarding claim 26, the system version of claim 8, see rationale above as previously addressed.

Regarding claim 27, the system version of claim 9, see rationale above as previously addressed.

Regarding claim 25, the system version of claim 12, see rationale above as previously addressed.

Regarding claim 29, a system for an application to communicate with an external entity, comprising:

an asynchronous event router capable of accepting asynchronous events from the external entity and forwarding them to one of: the application and a proxy object;

the application capable of invoking a function on the proxy object and capable of accepting asynchronous events from the asynchronous event router [0104];

the proxy object capable of accepting asynchronous events from the asynchronous event router and invoking the function on the external entity ([0146]);

wherein if the function is not defined by the proxy object, the proxy object is capable of dynamically determining whether or not the function invocation is proper

based on the metadata([0146]).

Regarding claim 30, the system version of claim 8, see rationale above as previously addressed.

Regarding claim 31, the system version of claim 9, see rationale above as previously addressed.

Regarding claim 32, the machine readable version of claim 11, see rationale above as previously addressed.

Regarding claim 33, the machine readable version of claim 12, see rationale above as previously addressed.

Regarding claim 34, the machine readable version of claim 29, see rationale above as previously addressed.

Regarding claim 35, the machine readable version of claim 3, see rationale above as previously addressed.

Regarding claim 36, the machine readable version of claim 15, see rationale above as previously addressed.

Regarding claim 37, the machine readable version of claim 8, see rationale above as previously addressed.

Regarding claim 38, the machine readable version of claim 9, see rationale above as previously addressed.

Regarding claim 39, the machine readable version of claim 10, see rationale above as previously addressed.

Regarding claim 40, which claims similarly as claim 11, see rationale above as previously addressed.

Regarding claim 41, which claims similarly as claim 12, see rationale above as previously addressed.

Regarding claim 42, which claims similarly as claim 13, see rationale above as previously addressed.

Regarding claim 43, which claims similarly as claim 14, see rationale above as previously addressed.

Regarding claim 44, which claims similarly as claim 15, see rationale above as previously addressed.

Regarding claim 45, which claims similarly as claim 16, see rationale above as previously addressed.

Regarding claim 46, which claims similarly as claim 17, see rationale above as previously addressed.

Regarding claim 47, which claims similarly as claim 18, see rationale above as previously addressed.

Correspondence information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 571-272-3698. The examiner can normally be reached on 10:00 am - 6:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ck.

Chude Kendall 12/1/06